



**MANUFACTURE OF SILICA SOL****Publication number:** JP58110417 (A)**Publication date:** 1983-07-01**Inventor(s):** TAKASE YUUZOU; MIWA MOTOMU; TADA SHIYUUICHI**Applicant(s):** ASahi DENKA KOGYO KK**Classification:****- international:** *C01B33/148; C01B33/141; C01B33/151; C01B33/00;* (IPC1-7); C01B33/141**- European:****Application number:** JP19810204699 19811218**Priority number(s):** JP19810204699 19811218**Also published as:** JP1023413 (B) JP1610764 (C)**Abstract of JP 58110417 (A)**

**PURPOSE:**To manufacture a silica sol contg. particles having desired particle sizes and a narrow particle size distribution by adding an active acidic silica hydrosol to an aqueous alkali soln. in the presence of a soluble alkali metallic salt under specified conditions. **CONSTITUTION:**An active acidic silica hydrosol such as an unstable silica hydrosol of  $\leq$  about 4pH obtd. by treating an alkali metallic silicate with a hydrogen type cation exchange resin is mixed with 40-1,000ppm soluble alkali metallic salt such as hydrochloride, sulfate or aluminate of Li, Na, K or Ce basing on the total amount, and the hydrosol is added to an aqueous alkali soln. at  $\geq$  about 70 deg.C with stirring under conditions which adjust the molar ratio of  $\text{SiO}_2/\text{R}_2\text{O}$  (R is an alkali metal or  $\text{NH}_3$ ) to  $\leq 10$ .; The resulting aqueous soln. is concentrated by an ordinary method to obtain a silica hydrosol having controlled particle sizes.

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